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(54) Fiber optic header with integrated power monitor

(57) An optical header for coupling a light source (102) to an optical fiber (101) is disclosed. The header preferably includes a substrate (100) that has a recess (102A) for a vertical cavity surface emitting laser (VCSEL), or alternatively an edge emitting laser. An optical fiber (101) is preferably attached to the substrate (100) and terminates at the light source (102). The end (101A) of the fiber (101) is preferably cleaved or polished to an angle such that light entering the fiber from the light source (102) is substantially reflected into the fiber (101). A reflective coating (105) is placed on the cleaved end (101A) of the fiber thereby permitting a small percentage of light to radiate away from the fiber (101) and toward a detector (103). The light preferably travels to the detector (103) through a transmission medium such as a prism (104) or an optical-grade epoxy. The header is particularly useful when used in conjunction with multiple fibers simultaneously to form an optical fiber array. The header is also useful to house an optical receiver, or to form a bi-directional header suitable for fiber optic communications.

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